

Adapting Northern Adelaide Project
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Adapting Northern Adelaide - Submission towards the new Climate Change Strategy for South Australia

The Cities of Salisbury and Playford are pleased to provide this submission towards the development of a new Climate Change Strategy for South Australia. We are currently preparing our Climate Change Adaptation Plan known as '*Adapting Northern Adelaide*' and are taking steps towards preparing a Climate Change Sector Agreement with the South Australian Government. Project partners include the Cities of Salisbury and Playford, with support from the Department of Environment, Water and Natural Resources, the Adelaide Mount Lofty Ranges Natural Resources Management (NRM) Board and the Federal Government under the Natural Disaster Resilience Program.

From decades of pioneering work in sustainable water management, the Northern Adelaide Region has already taken significant steps to be more resilient to climate change impacts. As a region with diverse strengths in manufacturing capacity, service industries, horticulture, research and development, Northern Adelaide is well placed to strengthen its resilience to climate change impacts, whilst taking a lead role in a low carbon and resource efficient economy.

As the Adapting Northern Adelaide project is not yet complete, the contribution for this Climate Change Strategy consultation is based on ideas we are exploring and would be interested in developing further with the State Government via the new Strategy. However, due to the short timeframes, these ideas do not represent the final position of the Councils. A final position on Adapting Northern Adelaide will be prepared by June 2016.

In this submission which addresses the six consultation papers, we distil four core areas of focus to help sustain a climate resilient Northern Adelaide Region that benefits from a low carbon transition.

These are to:

1. Collaborate with local government and relevant stakeholders on the best way to approach implementation of Regional Climate Adaptation Plans, clarifying appropriate state-wide coordination and roles for localised collaboration on specific themes and programs.
2. Encourage that the Premiers Climate Change Council Vision or similar vision be adopted to underpin long term decision making for climate adaptation and mitigation towards a low carbon economy in South Australia.
3. Update the South Australia's climate change legislation to include a revised 2050 greenhouse gas reduction goal and a long term renewable energy goal.
4. Facilitate regional initiatives which complement the Carbon Neutral Adelaide commitment. Adapting Northern Adelaide has an identified opportunity to grow as a Green Industries Region which would be well suited to the strengths of Northern Adelaide.

1 Overview consultation paper

In the northern Adelaide Region, there is strong interest in both exploring how to adapt to climate change, and developing and diversifying the economy. We note that opportunities for adaptation and economic benefit are interrelated. For example, the work undertaken in this region towards sustainable water management in stormwater use, Aquifer Storage and Recovery (ASR), wetlands enhancement and wastewater recycling, have not only enhanced the region aesthetically and environmentally, but also served to underpin the Northern Adelaide food bowl in a drying climate and provided alternative sources of water for industry.

The Northern Adelaide Region already has a number of businesses manufacturing world class solar panels and structural components for renewable energy systems, and has shared in embracing energy efficiency, resource use efficiency and recycling in all areas. The Northern Adelaide Region is therefore well placed to benefit from the opportunities that a low carbon economy will provide, for green industries in the region to grow, and for all businesses operating in Northern Adelaide to become more sustainable and climate resilient.

The Councils participating in Adapting Northern Adelaide share in their vision for a sustainable future and are working towards meeting the expectations of community via the *Salisbury City Plan 2020* and business planning aimed towards the *Playford Community Vision 2043*. Based on the analysis conducted in preparing the Adapting Northern Adelaide regional profile report, these values include:

- Liveable communities;
- Active and healthy lifestyles;
- Educated and skilled workforce;
- Prosperous and vibrant local economy;
- Infrastructure for the economy and community;
- Sustainable water management and water security; and
- Sustainable and resilient natural environments.

The councils in preparing the Adapting Northern Adelaide Plan therefore support the *Next Steps* as identified in the Overview Consultation Paper for partnerships between business, government, research institutions and the community to develop low carbon and green industries in Northern Adelaide. In this context, we are investigating the opportunity to host an Adaptive Economy Forum as part of the development of the Adapting Northern Adelaide Plan which will serve to bring together partners working on economic transition, and climate adaptation.

It is important that there is consistency between the Premier's Climate Change Council vision for SA and the vision that sits at the core of SA's new Climate Change Strategy.

We also support that there be a stronger approach to integrate climate adaptation, greenhouse gas mitigation and economic development recognising that these aspects are largely interdependent on each other.

2 Lead consultation paper

2.1 Climate Change and Greenhouse Gas Emissions Reduction Act (2007)

2.1.1 Part 2 Targets of the Act

The targets of South Australia's Climate Change Legislation could be updated to be consistent with the long term vision for a sustainable low carbon economy. Whilst the long term greenhouse gas reduction target is currently set at 60% below 1990 levels, there is recognition that if an objective is adopted to limit the global temperature increase to within 2 degrees of pre-industrial levels, even greater reduction targets will be required.

It would also be appropriate to extend the 2015 50% Renewable Energy target, to set a 2050 renewable energy goal.

These types of long term targets serve to create the conditions of greater investment certainty for continued low carbon projects to be built in South Australia.

2.1.2 Sector Agreements

The opportunities for businesses to use the Climate Change Sector Agreement mechanism to demonstrate their efforts and increase branding opportunities are broadly supported.

It is suggested that the mechanism to provide for Climate Change Agreements is further developed to allow businesses and individuals to participate more easily, and this may include creating several categories:

- The larger voluntary agreements may follow the template currently used.
- A small scale voluntary sector agreement process should be available online for any business or individual seeking to make their commitments online, via a short web application process. The Government could also provide an automated standard level of response and collaboration for such agreements.

3 Reduce consultation paper

3.1 Electric Rail for the Northern Adelaide Region

The electrification of rail services to the Northern Adelaide Region provides exciting opportunities to grow as a low carbon economy, through facilitation of new sustainable urban development opportunities around rail nodes and the opportunities created for businesses. It is suggested that operating this service with accredited renewable energy (similar to the process used in the ACT for Canberra to be 100% renewable by 2020) could further grow South Australia's renewable energy sector and the role of Northern Adelaide in participating in this growth.

Such initiatives, together with the residential transitions to renewable energy already occurring, will further position South Australia as a leading Renewable Energy State. Favourable conditions and procurement policies to encourage local suppliers where possible could strengthen low carbon employment and investment in the Northern Adelaide Region.

3.2 Greening South Australia

3.2.1 Rural Areas

Whilst there is a Nature Links Corridor plan for South Australia, there are further opportunities to create habitat corridors across the regions and state, including in Northern Adelaide. Councils of Northern Adelaide are already significantly involved in revegetation and corridor projects, and will be looking at further opportunities to target revegetation and enhancement actions for connecting habitats. This may also help to attract ERF funding and other environmentally based funding for regions, with reducing emissions and creating carbon offsets as an extra benefit.

Seagrasses, coastal mangroves and salt marshes are also capable of sequestering carbon and these could also be included in such a plan, particularly near Adelaide and in the Northern Adelaide Coastline.

3.2.2 Urban Areas

Minimising urban heat island impacts is a major challenge particularly in some areas of metropolitan Adelaide due to limited tree coverage. It is suggested that there be a State Government funded strategy to accelerate the undergrounding of power lines in the worst affected heat island areas where power line clutter limits the opportunities to enable appropriate levels of street tree coverage. There is a parallel need for street lights to be converted from old lamps to more efficient LED lamp systems. There would also be community benefits in health and well-being from such an initiative (see more about this under our response to Adaptation).

4 Innovate consultation paper

Growing green industries in the Northern Adelaide Region could create the conditions to bring together low carbon investment, research opportunities, engineering, advanced manufacturing and climate adaptation. This would create the market signals and conditions for innovation to continue to grow.

The manufacturing, research and development capacity of the Northern Adelaide region can provide a sound platform for new low carbon development such as for designing, developing, testing and manufacturing components for electric vehicles, renewable energy recharging, and energy storage and new renewable technologies. Such ideas should be explored as part of the Northern Economic Plan process.

Adapting Northern Adelaide supports activities that encourages and showcases innovation such as *festivals of ideas* on low carbon technologies and electric vehicle events to be held in Northern Adelaide.

5 Adapt consultation Paper

South Australia is leading on Climate Change Adaptation having developed and implemented a state-wide Climate Adaptation process and program. The Councils supporting Adapting Northern Adelaide are pleased to be a part of this important work.

5.1 Implementation of Adaptation Planning

As the Regional Adaptation Plans are completed, there will be some areas where a state-wide coordination of implementation activities will be necessary. Clarifying and strengthening lead roles and collaborative partnerships will be a key to success. For example, in Community Health, Regions may identify climate adaptation needs that are similar across the state which may best be coordinated at a state level. However, health services, emergency preparedness, local government services and community programs are delivered at a local scale (as identified in Councils' Public Health Plan). Clarifying the necessary partnerships to implement climate adaptation to protect human health is therefore an area which needs State-wide Strategic support for local collaborative planning, programs and delivery of services.

Recognising the interdependence of climate adaptation, mitigation and economic development in a low carbon economy, Adapting Northern Adelaide encourages integrated thinking. Creating a market wide cultural shift, will require clear messaging about the role of individuals, households, businesses to contribute, including as end users of low carbon products and services.

5.2 Green Infrastructure

Adapting Northern Adelaide is supportive of initiatives for designing Green Infrastructure. We see opportunities to incorporate green infrastructure thinking in new developments water management infrastructure, in precincts and building infrastructure, and in major projects such as future rail redevelopment and electrification. Greater adoption of green infrastructure would optimise the co-benefits of human needs for adapting to and mitigating climate change impacts (including passive cooling, plant selection including local native species, pedestrian and cycling transport). Another co-benefit would be for our local flora and fauna to persist and adapt in what is for them a geographically fractured natural landscape where their ability to move within the landscape to more appropriate habitats as climate changes is currently impeded. This could include building on existing work prioritising local species selection and a diversity of habitat types and structures that are connected via corridors along river and creek pathways, the conservation and recreation parks in the hills, and for the length of the coastal region incorporating the Adelaide International Bird Sanctuary.

5.3 Sustainable Urbanisation

There is strong interest in further planning and development partnerships to create a sustainable urban form. Compact, walkable neighbourhoods which integrate sustainable and green infrastructure principles provide a lower carbon footprint, better integration with transport and other services. Sustainable built form with green infrastructure principles can help communities be resilient to heat island impacts by contributing to cooler neighbourhoods. In addition, the adjoining natural, horticultural and agricultural assets of regions are preserved enabling regions to remain attractive for well-being and economic benefits including tourism.

5.4 Carbon Neutral Adelaide – Our Complementary Initiative

The Adapting Northern Adelaide Councils note the Carbon Neutral Adelaide initiative and would investigate options for and feasibility of creating a complementary initiative in our region. We describe our opportunity for Northern Adelaide to develop as a Green Industries Region.

5.5 Northern Adelaide Green Industries Region

We believe that each region has different opportunities. As a region, Northern Adelaide is suited to clean food production, engineering and advanced manufacturing, and is rich in biodiversity assets such as the Adelaide International Bird Sanctuary, the Para River and nearby conservation parks which provide further development opportunity for nature based tourism. Our efforts could be coordinated as a *Green Industries Region* which would fit neatly with Carbon Neutral Adelaide. We have also identified cross region opportunities in areas such as recycling, low food miles and creating carbon offsets.

6 Low Carbon Investment Plan - Strategy Paper

The role that Renewables SA has played has been extremely valuable in providing foundation work and studies to inform the future potential of renewable electricity in South Australia. We encourage that the work of Renewables SA continue into the new areas such as determining the opportunities and risks associated with local energy storage, and the impact of electric vehicles on energy markets. This would serve to underpin further research and development of renewable energy technologies in Northern Adelaide.

6.1 National Policy Frameworks

The National GreenPower Accreditation Framework has recently been reviewed and further reforms have been suggested to better link the program to Federal Government policies. Currently, the Councils of the Northern Adelaide Region are investing in on-site renewable energy systems and energy efficiency as the most immediate priorities for reducing electricity costs and emissions from electricity consumption. Should higher targets be adopted however, the option of purchasing accredited GreenPower should be maintained and improved enabling a higher percentage of renewables or even 100% renewable energy use.

Appendix 1 Green Industries of the Northern Adelaide region

Striving for Northern Adelaide to be a nationally and globally recognised Green Industries Region.

Northern Adelaide is well known for its decades of achievement in water management which has created great places to live and sustainable water resources to underpin businesses, our horticulture (or Northern Adelaide Food Bowl), our lakes, our parks and our gardens. Key features include, landscape and nature based stormwater management, Aquifer Storage and Recovery (ASR), the Bolivar Wastewater Recycling Plant and Virginia Pipeline Scheme. The region is well placed to increase its food manufacturing and advanced processing in close proximity to growers and via the establishment of a food processing hub.

Another strength, is the region's diversity in its capabilities which include; advanced manufacturing, renewable energy manufacturing, energy efficiency services, waste to resources capabilities, carbon offset providers and strong research and development capabilities supported by our local universities and research organisations.

More opportunities for Green Industries in the Northern Adelaide Region

At a time of economic change and with changes in climate, there are new and growth opportunities emerging, for green businesses particularly where the region has natural and built advantages established over decades. For example:

- The Northern Adelaide Regions horticulture is becoming more highly valued as it is underpinned by secure water access and is more resilient to the impacts of climate change. An expanded Virginia Pipeline scheme could support further growth and a food processing hub could add significant value to this industry for long term benefits.
- The recently established Adelaide International Bird Sanctuary has unlocked the potential to establish nature based tourism providing managed and guided access to see the regions amazing shorebird and migratory bird populations. There is a unique story to tell for every different bird species that visits our region, with some travelling tens of thousands of kilometres each year to places such as Japan, China, and Russia.
- As South Australia continues on its pathway towards 50% renewable energy the Northern Adelaide Region is well placed to continue its growth as a renewable energy region. Already, Northern Adelaide is home to renewable industries which include making solar PV systems, large scale solar components such as framework, engineering and tracking structures and solar reflectors.
- In the domestic market there is a renewable energy transformation taking place with approximately a quarter of households now with on-site solar systems, and with an eye on incorporating battery storage systems and electric vehicles.
- Energy efficiency, water efficiency, resource efficiency including waste to recycling programs are integral with being climate resilient in the Northern Adelaide Region. No matter what the business, there are continued benefits from further efficiency savings and new green industry opportunities.